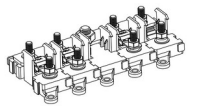


Note: Initial solar calculation was on 3 parallel panels, hence the 32mm<sup>2</sup> cable for higher amps. Until I realised series connection is better for MPPTs thus I could've gone 6mm<sup>2</sup>. 2.7Wh loss vs 15.7Wh loss at full 150v. However initially for maybe the first 2 years we may only have 2 \* 24v panels, thus nominal V is 48v at max 9A in the day (432W).  
 6mm<sup>2</sup> = 2.92% vdrop 12.6W  
 32mm<sup>2</sup> = 0.5% vdrop 2W

- Maxi Fuse 60A
- Maxi Fuse 40A
- 200A AMI fuse



24V+ve Busbar  
 Bussmann LMI fuse holders stackable  
 Fuses L to R  
 40A Windlass  
 200A inverter  
 150A busbar  
 200A inverter  
 100A blade



Fuse AMI 200A

Drop to <16mm<sup>2</sup> as to terminal size

From 24V bus  
 25mm<sup>2</sup>

12v LiFePO4  
 12v LiFePO4  
 Windlass  
 Batteries 12v 200Ah  
 Pulse 600A 1s

Phoenix 24V 5kVA inverter

Mains

Battery sense  
 Starter Motor  
 Alternator

12v Lead 1000CCA  
 DC2DC Orion smart charger 24/12-20A (240W) Isolated  
 Orion smart's wired together - one off while the other is on

Fuse AMI 40A  
 6B&S 13.3mm<sup>2</sup>  
 4mRed  
 4mBlack

Fuse AMI 60A

32mm<sup>2</sup> 75°C  
 25m out and back

2B&S  
 32mm<sup>2</sup> \* 2m

24V negative  
 150A 10 Gang  
 Common Bus -  
 10x #8-32 Screw

Blue Sea MaxiBus  
 250A BusBar -  
 8mm Studs

DC2DC converter  
 24-12 360W 30A

DC2DC converter  
 24-12 360W 30A

DC2DC converter  
 24-12 360W 30A

Battery Balancer

12v LiFePO4  
 12v LiFePO4  
 12v LiFePO4  
 12v LiFePO4  
 House battery 24V 2s2p

12v LiFePO4  
 12v LiFePO4  
 Navigation Batteries 12v 200ah

24V+ve Busbar  
 Victron Mega 250A  
 Fuses L to R  
 40A Windlass  
 200A inverter  
 150A busbar  
 200A inverter  
 100A blade

24v positive  
 150A 10 Gang  
 Common Bus -  
 10x #8-32 Screw

Blade fuses <50A  
 Left 30A  
 0A  
 30A  
 Right 30A

4mm<sup>2</sup>  
 2.5m one way  
 5m return

4mm<sup>2</sup>  
 2.5m one way  
 5m return

6mm<sup>2</sup>  
 3.5m one way  
 7m return

6mm<sup>2</sup>  
 1.8m one way  
 3.6m return

50mm<sup>2</sup>

6mm<sup>2</sup>  
 3.4m one way  
 6.8m return

4mm<sup>2</sup>  
 1.5m one way  
 3m return

6mm<sup>2</sup>  
 1.5m one way  
 3m return

30A

30A

30A

30A

30A

30A

30A

30A

30A

30A